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Sheet 1

15

Attorney [REDACTED]

Attorney Docket Number	03BNZ001
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Complete if Known

Application Number	10/695,522
Filing Date	October 28, 2003
First Named Inventor	Krowl
Art Unit	1753
Examiner Name	WOOP
Attorney Docket Number	03BNZ001

U. S. PATENT DOCUMENTS

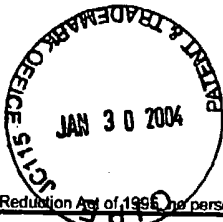
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Examiner Signature	<i>[Signature]</i>	Date Considered	12/1/04
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Sheet	2	of	4
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Application Number	10/695,522
Filing Date	October 28, 2003
First Named Inventor	Krowl
Art Unit	1755
Examiner Name	WDD
Attorney Docket Number	03BNZ001

U. S. PATENT DOCUMENTS

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.†	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
C/M		US- 4769074	09-06-1988	Holcombe Jr. et al.	
		US- 4773470	09-27-1988	Libby et al.	
		US- 4775505	10-04-1988	Kuroda et al.	
		US- 4780141	10-25-1988	Double et al.	
		US- 4840672	06-20-1989	Baes	
		US- 4874726	10-17-1989	Kleeb et al.	
		US- 4885203	12-05-1989	Wakat	
		US- 4895890	01-23-1990	Sawanobori et al.	
		US- 4897294	01-30-1990	Libby et al.	
		US- 5073199	12-17-1991	Krowl et al.	
		US- 5242649	09-07-1993	Yamamoto et al.	
		US- 5340513	08-23-1994	Koslowski et al.	
		US- 5411793	05-02-1995	Ide et al.	
		US- 5491020	02-13-1996	Ide et al.	
		US- 5632326	05-27-1997	Gough	
		US- 5641348	06-24-1997	Miller et al.	
C/M		US- 5641584	06-24-1997	Andersen et al.	
		US- 5654048	08-05-1997	Andersen et al.	
		US- 5656195	08-12-1997	Mielke et al.	

FOREIGN PATENT DOCUMENTS

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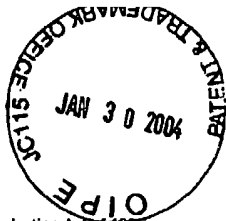
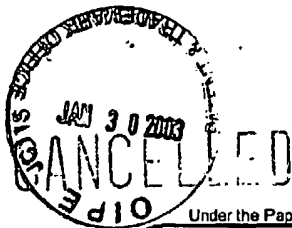
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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Sheet 3 of 5

Application Number	10/695,522
Filing Date	October 28, 2003
First Named Inventor	Krowl
Art Unit	1755
Examiner Name	WOOD
Attorney Docket Number	03BNZ001

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
CWO		US- 5830548	11-03-1998	Andersen et al.	
		US- 5858083	01-12-1999	Stav et al.	
		US- 5871857	02-16-1999	Alhamad	
		US- 5928741	07-27-1999	Andersen et al.	
		US- 5935655	10-10-1999	Beleck	
		US- 5935699	10-10-1999	Barber	
		US- 5944888	08-31-1999	Perich et al.	
		US- 6572697	06-03-2003	Gleeson et al.	
		US- 6620487	09-16-2003	Tonyan et al.	
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
CWO		(Abstracts only)				
		JP 48085621	★	11-13-1973	Ito	
		JP 48085622	★	11-13-1973	Ito	
		JP 63074949	★	04-05-1988	Tsuchimoto	
		JP 01298051	★	12-01-1989	Kakimoto	
		CS 266097	★	11-14-1989	Rovnanik	

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WOOD

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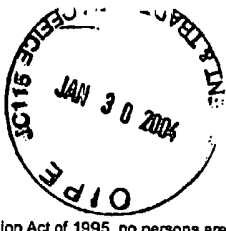
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Sheet	4	of	5
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Application Number	10/695,522
Filing Date	October 28, 2003
First Named Inventor	Krowl
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Examiner Name	Woofer
Attorney Docket Number	03BNZ001

U. S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
CJP		KR 9511940	10-12-1995	Min		
		JP 05310464	11-22-1993	Imai		
		JP 07278532	10-24-1995	Mikate		
		CN 1253924	05-24-2000	Wang		
		CN 1204678	01-13-1999	Sun		
		PL 148353	10-31-1989	Ulman		

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Application Number	10/695,522
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Filing Date	October 28, 2003
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First Named Inventor	Krowl
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Art Unit

Examiner Name

Attorney Docket Number	03BNZ001
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Sheet

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of

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NON PATENT LITERATURE DOCUMENTS

Examiner Signature	<i>WAB</i>	Date Considered	7/21/04
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1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.88. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.174. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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